

Amendments to the Claims

This listing of claims will replace all prior versions, and lists, of claims in the application:

Listing of Claims:

Claim 1 (original): An inverted microscope having a U-shaped microscope housing (1), on one limb (2) whereof is provided a horizontal changing surface (3) for optomechanical adaptation of a module,

wherein said module (4) comprises a horizontally protruding base unit (5) having on the one hand a binocular tube (6) placed thereon, and on the other hand a photo tube (7), with photo device (8), placed thereon.

Claim 2 (original): The inverted microscope as defined in Claim 1, wherein the module (4) is embodied as a one-piece combination module (4; 5, 6, 7) and has on its underside a module changing apparatus (9) that corresponds to the horizontal changing apparatus (3).

Claim 3 (currently amended): The inverted microscope as defined in Claim 1 or ~~Claim 2~~, wherein the vertical optical axis (10) of the observation beam bundle, extending in the one limb (2), penetrates through a first optical deflection element (11) after entering the base unit (5), and then passes through a first tube lens (12) arranged in the binocular tube (6), while the photo beam (13) deflected at the optical deflection element (11), after passage through a second tube lens (14) and after deflection at a second optical deflection element (15), enters the photo tube (7) with attached photo device (8).

Claim 4 (currently amended): The inverted microscope as defined in ~~any of the foregoing claims~~ Claim 1, wherein the optical element (11) can be selectively brought into or out of the working position.

Claim 5 (currently amended): The inverted microscope as defined in ~~any of the foregoing claims~~ Claim 1, wherein an infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 6 (currently amended): The inverted microscope as defined in ~~any of the foregoing claims~~ Claim 1, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 7 (original): The inverted microscope as defined in Claim 6, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 8 (new): The inverted microscope as defined in Claim 2, wherein the vertical optical axis (10) of the observation beam bundle, extending in the one limb (2), penetrates through a first optical deflection element (11) after entering the base unit (5), and then passes through a first tube lens (12) arranged in the binocular tube (6), while the photo beam (13) deflected at the optical deflection element (11), after passage through a second tube lens (14) and after deflection at a second optical deflection element (15), enters the photo tube (7) with attached photo device (8).

Claim 9 (new): The inverted microscope as defined in Claim 2, wherein the optical element (11) can be selectively brought into or out of the working position.

Claim 10 (new): The inverted microscope as defined in Claim 3, wherein the optical element (11) can be selectively brought into or out of the working position.

Claim 11 (new): The inverted microscope as defined in Claim 8, wherein the optical element (11) can be selectively brought into or out of the working position.

Claim 12 (new): The inverted microscope as defined in Claim 2, wherein an infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 13 (new): The inverted microscope as defined in Claim 3, wherein an infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 14 (new): The inverted microscope as defined in Claim 4, wherein an infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 15 (new): The inverted microscope as defined in Claim 8, wherein an infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 16 (new): The inverted microscope as defined in Claim 9, wherein an infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 17 (new): The inverted microscope as defined in Claim 10, wherein an infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 18 (new): The inverted microscope as defined in Claim 11, wherein an infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 19 (new): The inverted microscope as defined in Claim 2, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 20 (new): The inverted microscope as defined in Claim 3, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 21 (new): The inverted microscope as defined in Claim 4, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 22 (new): The inverted microscope as defined in Claim 5, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 23 (new): The inverted microscope as defined in Claim 8, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 24 (new): The inverted microscope as defined in Claim 9, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 25 (new): The inverted microscope as defined in Claim 10, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 26 (new): The inverted microscope as defined in Claim 11, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 27 (new): The inverted microscope as defined in Claim 12, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 28 (new): The inverted microscope as defined in Claim 13, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 29 (new): The inverted microscope as defined in Claim 14, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 30 (new): The inverted microscope as defined in Claim 15, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 31 (new): The inverted microscope as defined in Claim 16, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 32 (new): The inverted microscope as defined in Claim 17, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 33 (new): The inverted microscope as defined in Claim 18, wherein the eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in the photo tube (7) or photo device (8).

Claim 34 (new): The inverted microscope as defined in Claim 19, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 35 (new): The inverted microscope as defined in Claim 20, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 36 (new): The inverted microscope as defined in Claim 21, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 37 (new): The inverted microscope as defined in Claim 22, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 38 (new): The inverted microscope as defined in Claim 23, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 39 (new): The inverted microscope as defined in Claim 24, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 40 (new): The inverted microscope as defined in Claim 25, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 41 (new): The inverted microscope as defined in Claim 26, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 42 (new): The inverted microscope as defined in Claim 27, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 43 (new): The inverted microscope as defined in Claim 28, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 44 (new): The inverted microscope as defined in Claim 29, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 45 (new): The inverted microscope as defined in Claim 30, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 46 (new): The inverted microscope as defined in Claim 31, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 47 (new): The inverted microscope as defined in Claim 32, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.

Claim 48 (new): The inverted microscope as defined in Claim 33, wherein the eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo device (8) have an HC correction.